

Use of coastal and estuarine food web models in politics and management: The need for an entire ecosystem approach

Program

Sunday 24th September 2017

Arrival

Monday 25th September 2017

09:00-09:15	Welcome at the Alfred-Wegener-Institut Helmholtz-Zentrum für Polar- und Meeresforschung, Wadden Sea Station Sylt	K.H. Wiltshire
09:15-09:25	Why are we doing this workshop?	U. Schückel, S. Horn chair: Harald Asmus
1. Introduction to the workshop		
The use of coastal and estuarine food web models in politics and management		
9:25-9:50	Bibliometric Review and Synthesis of Ecological Network Analysis (2010-2016)	S. R. Borrett, J. Moody, L. Sheble, E. Anway
9:50-10:15	Ecological Network Analysis: comparative or benchmark metrics?	B.D. Fath
10:15-10:40	Assessment of ecosystem function by means of Ecological Network Analysis	D. Baird
10:40-11:00	<i>Coffee break</i>	
2. Presentation of Case Studies and food web methodology		
11:00-11:15	Tracking the data provenance for multilayer network modeling and analysis of foodwebs	M.K. Lau and A.M. Ellison
11:15-11:30	Developing a Modelling Framework for Understanding Complex Estuarine Food webs using R packages LIM and enaR	C. Waspe, U. Scharler, R. Mahabir
11:30-11:45	Utilization of trophic marker data to constrain theoretical food web models. Case study of a seagrass bed ecosystem model	M. Haraldsson, S.R. Pacella, P. Richard, D. Philips, T. H. De Witt, N. Niquil, B. Lebreton
11:45-12:00	The Role of Mesozooplankton within a South African Estuarine Foodweb	C. D. Garvie, U. M. Scharler, H. L. Jerling
12:00-12:15	Relationships between meiofauna and food source properties in soft-bottom coastal habitats	L. van der Heijden, J. Rzeznik-Orignac, R. Asmus, R. M. Graeve, N. Niquil, Q. Bernier, D. Fichet, M. Bréret, M. P. Kadel, L. Beaugeard, H. Asmus, H. B. Lebreton
12:15-13:15	<i>Lunch</i>	
3. Presentation of Case Studies		
Examples of network applications		
13:15-13:30	Seasonal dynamics and functioning of the Sylt-Rømø Bight, Northern Wadden Sea	C. de la Vega, S. Horn, D. Baird, D. Hines, S. Borrett, R. Asmus, H. Asmus
13:30-13:45	Are grey seals exerting a top-down control in the Baltic Sea?	D. Costalago
13:45-14:00	Impact of submerged vegetation on matter fluxes in shallow coastal lagoons of the Baltic Sea	M. Paar, I. Blindow
14:00-14:15	Developing an ecosystem-based approach to define the ecological carrying capacity of bivalve aquaculture	L. C. Kluger, M. Wolff
14:15-14:30	Do birds influence the structure and functioning of coastal food webs?	S. Horn, C. de la Vega, R. Asmus, P. Schwemmer, L. Enners, S. Garthe, H. Asmus
14:30-14:45	<i>General discussion</i>	
14:45-15:15	<i>Coffee break</i>	
15:15-17:30	4. Round table discussions	
	Round table I: Scientific bases for ENA models	
	Round table II: Towards an assessment	
	Round table III: enaR software application from science to management (chair: Stuart Borrett?, moderator: Mathew Lau?)	
19:00	<i>Dinner in Restaurant Königshafen</i>	

Tuesday 26th September 2017

9:00-10:00	Presentation of the 3 Round Tables	
10:00-10:30	<i>Coffee break</i>	
5. From science to management		
Food web modeling in ecosystem-based management		
10:30-10:55	A history of functioning indicators proposed to OSPAR illustrated with the case study of the offshore wind farm in the Bay of Seine. What is next: connecting ecological and social network analyses?	N. Niquil, A. Raoux, G. Safi, G. Halouani, J.-C. Dauvin, C. Mazé
10:55-11:20	Ecosystem indices are strictly related to node and flow level attributes of biomass, productivity and diversity	U. Scharler, A. Ludovisi
11:20-11:45	How to apply ENA indicators in combination with other indices to assess estuarine ecosystems and to serve the environmental EU Directives	V. N. de Jonge, U. Schückel

6. Presentation of Case Studies

Nature conservation strategies

11:45-12:10	An ecological network approach to retrospectively analyse and forecast multilevel health impacts of anthropogenic stressors on the Baltic Sea ecosystem	I. Eulaers, T. Härkönen, J.-P. Desforbes, K. Hårding, F.F. Rigét, U. Siebert, M. Tange Olsen, C. Sonne, R. Dietz U. Schückel et al.
12:10-12:35	N.N.	

Lunch

7. Round table discussion

Application and Management

Poster session with coffee

15:00-15:30	
15:30 - 18:00	Round table: Application and Management to be continued

19:00 *Buffet in the Wadden Sea Station*

Wednesday 27th September 2017

09:00-10:00 Discussion on outcomes and recommendations for science and management

12:00 Departure